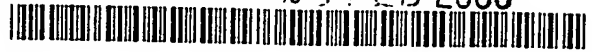


(19) Weltorganisation für geistiges Eigentum  
Internationales Büro



24 FEB 2005



(43) Internationales Veröffentlichungsdatum  
29. April 2004 (29.04.2004)

PCT

(10) Internationale Veröffentlichungsnummer  
WO 2004/036073 A1

(51) Internationale Patentklassifikation<sup>7</sup>: F16C 33/08

(21) Internationales Aktenzeichen: PCT/EP2003/010446

(22) Internationales Anmeldedatum:  
19. September 2003 (19.09.2003)

(25) Einreichungssprache: Deutsch

(26) Veröffentlichungssprache: Deutsch

(30) Angaben zur Priorität:  
102 46 976.8 9. Oktober 2002 (09.10.2002) DE

(71) Anmelder (für alle Bestimmungsstaaten mit Ausnahme von  
US): KS GLEITLAGER GMBH [DE/DE]; Am Bahnhof  
14, 68789 St. Leon-Rot (DE).

(72) Erfinder; und

(75) Erfinder/Anmelder (nur für US): CASPERS, Gerhard  
[DE/DE]; Krautgärten 5, 76669 Bad Schönborn (DE).  
SCHUBERT, Werner [DE/DE]; Bergwerkstr. 23, 69168  
Wiesloch (DE). GRÖNNIGER, Bernhard [DE/DE];  
Hauptmann-Schöningh-Str. 1, 46716 Meppen (DE).

(74) Anwalt: FRIZ, Oliver; Dreiss, Fuhlendorf, Steimle &  
Becker, Postfach 103762, 70032 Stuttgart (DE).

(81) Bestimmungsstaat (national): US.

(84) Bestimmungsstaaten (regional): europäisches Patent (AT,  
BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,  
HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

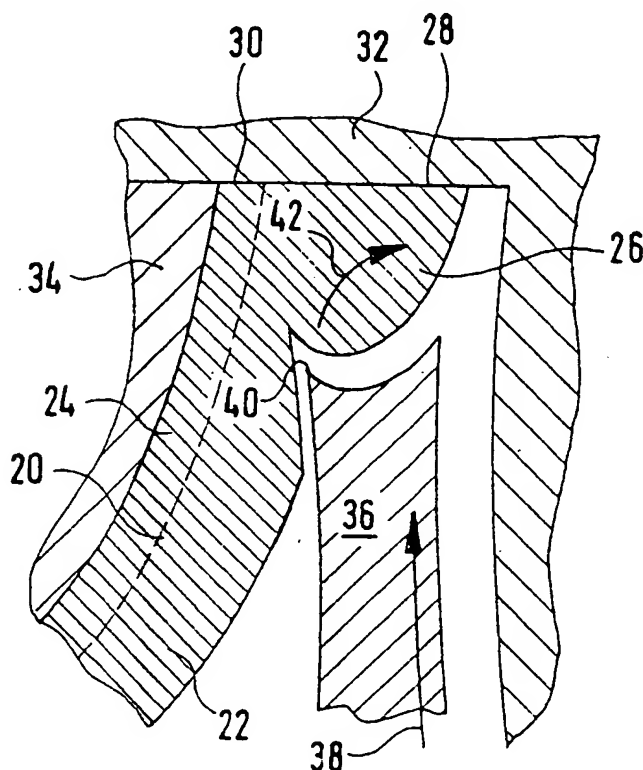
Veröffentlicht:

— mit internationalem Recherchenbericht

[Fortsetzung auf der nächsten Seite]

(54) Title: PLAIN BEARING SHELL AND METHOD FOR PRODUCING A HOLDING PROJECTION ON A PLAIN BEARING SHELL

(54) Bezeichnung: GLEITLAGERSCHALE UND VERFAHREN ZUM HERSTELLEN EINES HALTEVORSPRUNGS BEI EINER GLEITLAGERSCHALE



(57) **Abstract:** The invention relates to a plain bearing shell (20) for positioning a crankshaft or a camshaft of a motor or for using as a motor connecting rod bearing shell, said plain bearing shell comprising a radially outwardly protruding holding projection (26) in the region of a separating surface (30) of the plain bearing shell. In order to simplify the handling of the plain bearing shell during the assembly, said bearing shell is embodied in such a way that the holding projection (26) continuously merges into the separating surface (30) of the bearing shell, and is formed by a stamp (36) on the outer side of the plain bearing shell such that the stamp (36) compresses the material on the outer side of the plain bearing shell, essentially tangentially in relation to the plain bearing shell and in the direction of the separating surface (30), in the region of the separating surface (30), the formed material of the holding projection (26) extending against a counter holding means (32) applied to the separating surface (30).

(57) **Zusammenfassung:** Die Erfindung betrifft eine Gleitlagerschale (20) zur Lagerung einer Kurbelwelle oder einer Nockenwelle eines Motors oder als Motorpleuellagerschale, mit einem nach radial aussen vorspringenden Haltevorsprung (26) im Bereich einer Trennfläche (30) der Gleitlagerschale; um die Handhabung

[Fortsetzung auf der nächsten Seite]

WO 2004/036073 A1

(12) INTERNATIONAL APPLICATION FILED UNDER THE INTERNATIONAL PATENT COOPERATION  
TREATY (PCT)

(19) World Intellectual Property Organization  
International Office

[WIPO  
seal]

28 FEB 2005

(43) International publication date: April 29,  
2004 (29.04.2004)

PCT

(10) International publication number:  
**WO 2004/036073 A1**

(51) International patent classification<sup>7</sup>: F16C 33/08

(21) International file number: PCT/EP2003/010446

(22) International application date: September 19,  
2003 (19.09.2003)

(25) Filing language: German

(26) Publication language: German

(30) Priority data:  
102 46 976.8 October 9, 2003 (09.10.2003) DE

(71) Applicant (*for all designated states except the  
United States*): **KS GLEITLAGER GMBH** [DE/DE];  
Am Bahnhof 14, 68789 St. Leon-Rot (DE)

(75) Inventor/Applicant (*for US only*): **CASPERS,**  
**Gerhard** [DE/DE]; Krautgärten 5, 76669 Bad  
Schönborn (DE). **SCHUBERT, Werner** [DE/DE];  
Bergwerkstr. 23, 69168 Wiesloch (DE). **GRÖNNIGER,**  
**Bernhard** [DE/DE], Hauptmann-Schönigh-Str. 1, 46716  
Meppen (DE).

(74) Attorney: **FRIZ, Oliver**; Dreiss, Fuhlendorf,  
Steimle & Becker, Postfach 103762, 70032 Stuttgart  
(DE).

(81) Designated state (*national*): US.

(84) Designated states (*regional*): European Patent (AT,  
BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,  
HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

Published:  
- *With International Search Report*

[continued on next page]

(72) Inventor; and

(54) Title: **PLAIN BEARING SHELL AND METHOD FOR PRODUCING A HOLDING PROJECTION OF A  
PLAIN BEARING SHELL**

[figure]

WO 2004/036073  
A1

(57) Abstract: The invention relates to a plain bearing shell (20) for supporting an engine crankshaft or camshaft, or as a connecting rod bearing shell of an engine, said plain bearing shell comprising a radially outward protruding holding projection (26) in the region of the separating surface (30) of the plain bearing shell. In order to simplify handling of the plain bearing shell during assembly, said bearing shell is formed in such a way that the holding projection (26) merges continuously into one separating surface (30) of the plain bearing shell, and is formed by a stamping tool (36) from the outside of the plain bearing shell by an approach in which, in the region of the separating surface (30), the stamping tool (36) compressively deforms the material on the outside of the plain bearing shell, essentially tangentially relative to the plain bearing shell and toward the separating surface (30), while a counter-holding means (32) is applied to the separating surface (30), to which means the formed material of the holding projection (26) extends.

**WO 2004/036073 A1**

*To explain the two-letter code and the other abbreviations, the reader is referred to the explanations ("Guidance Notes on Codes and Abbreviations") at the beginning of each regular edition of the PCT Gazette.*